

ABSTRACT

A replaceable spiral wound membrane element can be inserted and removed from its housing or pressure vessel in one piece for servicing or replacement. The replaceable wound membrane element preferably includes a concentrate pipe connected to spacers and membranes that are wound around the concentrate pipe to form a spiral membrane element. After the replaceable membrane element is placed inside its housing, its dilute spacers are filled with ion exchange resin and the housing is sealed to form an electrodeionization (EDI) module.